

**REVIEW OF THE SCYDMAENIDAE (COLEOPTERA) OF  
EASTERN ASIA, WITH PARTICULAR REFERENCE TO  
SCYDMAENUS, AND DESCRIPTION OF THE FIRST  
SCYDMAENID FROM HAINAN ISLAND, CHINA**

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*Abstract.*—The discovery of a new species of Scydmaenidae (Coleoptera) from Hainan Island, People's Republic of China (hereafter as China), prompted this review of the East Asian Scydmaenidae. *Scydmaenus hainanensis* O'Keefe, n. sp., from Mt. Wu-Zhi-Shan, is the first species of Scydmaenidae described from Hainan Island and the seventh species of *Scydmaenus* Latreille described from China. Illustrations of the habitus, antenna, and male genitalia for *S. hainanensis*, a discussion of its relationship to other *Scydmaenus*, and a key to the *Scydmaenus* of China are included. A catalog of the species of eastern Asia and a discussion of their relationships to the scydmaenid fauna of other regions are presented.

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The family Scydmaenidae (Coleoptera: Staphylinoidea) of eastern Asia has received relatively little attention. Only 97 species of Scydmaenidae have been described from eastern Asia (eastern Russia, Korea, China, Japan, and Taiwan) (see catalog below). These are considerably fewer species, considering the area covered, than are known from either the Nearctic (some 230 species) or the western Palearctic (over 300 species), and is in sharp contrast to southeast Asia and Indonesia where the number of known species is nearly 400. Before 1915, only 27 species were known from eastern Asia: 5 from eastern Russia (Reitter 1896), 6 from Taiwan (Reitter 1914), and 16 from Japan (Reitter 1891; Sharp 1874, 1886). Since 1962, 68 new species have been described from this region. Many of these were described from Taiwan (22) (Franz 1985), eastern Russia (22) (Kurbatov 1988, 1990a, 1990b, 1991, 1993a, 1993b, 1995), or Japan (13) (Franz 1976a; Hisamatsu 1985; Kurbatov 1995; Nakane 1963; Sawada 1962). Only 9 species have been described from China (Franz 1968, 1985, 1988) and one from Korea (Franz 1995).

To date, only three genera of Scydmaenidae are known from China (*Euconnus* Thomson, *Horaemorphus* Franz, and *Scydmaenus* Latreille) and at least two others (*Eutheia* Stephens and *Stenichnus* Thomson), found on Taiwan, are likely to occur in China. A series of *Scydmaenus* (collected by LJK) were collected from Hainan Island, China. These represent the first scydmaenids known from Hainan Island and the tenth species known from China. In this paper, the senior author (STO) describes this new species, and we present a review of the eastern Asian Scydmaenidae.

A key to the known species of *Scydmaenus* of China is provided below. Undoubtedly, this key will need to be expanded and modified as additional species are discovered. Franz (1983: 180–182) provided a key to the species of *Scydmaenus* of Singapore, Malakka, Thailand, and Vietnam. There are no keys to the 17 species of

*Scydmaenus* from Taiwan, Japan, or Russia and it is beyond the scope of this project to provide one at this time.

KEY TO THE SPECIES OF *SCYDMAENUS* OF CHINA

1. Posterior margin of pronotum with 2 foveae . . . . . 2
  - Posterior margin of pronotum with 4 foveae . . . . . 4
2. 1.80–2.00 mm in length . . . . . 3
  - 2.50–2.90 mm in length . . . . . *S. kunmingensis* Franz
3. Antennae longer than head and pronotum combined; each elytron with basal impression; apex of aedeagus narrowed, elongate (Franz 1988:24, fig. 1a); Yunnan and Sichuan Provinces . . . . . *S. chinensis* Franz
  - Antennae shorter than head and pronotum combined; elytra without basal impression; apex of aedeagus broad, emarginate (Franz 1985:118, fig. 28); Fujian Province . . . . . *S. kiatunensis* Franz
4. Antennae shorter than head and pronotum combined; Fujian or Hainan Provinces . . . . . 5
  - Antennae as long as or longer than head and pronotum combined; Sichuan Province . . . . . 6
5. Apex of aedeagus tapered, unmodified (Franz 1985:115, fig. 27); elytra with a basal impression; Fujian Province . . . . . *S. fukiensis* Franz
  - Apex of aedeagus broad, emarginate (Fig. 3b); elytra without basal impression; Hainan Province . . . . . *S. hainanensis* O'Keefe n. sp.
6. Antennomere VIII wider than long; antennomere I 2.5 times longer than wide; apex of aedeagus simple, unmodified (Franz 1968:538, fig. 2) . . . . . *S. szechuanensis* Franz
  - Antennomere VIII as long as wide; antennomere I 2 times longer than wide; apex of aedeagus modified into dorsal and ventral directed points (Franz 1968:537, fig. 1) . . . . . *S. sinensis* Franz

***Scydmaenus* (s. str.) *hainanensis* O'Keefe new species**

Figs. 1–3.

**Types.** Holotype: male: CHINA, Hainan Island, Mt. Wu-Zhi-Shan, 800–1,500 m, 23-29-III-1998, Li Jing Ke coll. (Field Museum of Natural History, Chicago, IL). Paratypes: 3 ♂♂ 1 ♀, same data as holotype. Paratypes deposited in collections of authors and Field Museum of Natural History.

**Diagnosis.** *Scydmaenus hainanensis* is typical for *Scydmaenus* (s. str.) (Fig. 1)—pygidium exposed, nearly vertical; antennal club distinct, compact, composed of distal 3 antennomeres with short, dense vestiture; antennomere I with distal notch; antennomeres III–VII slightly longer than wide, V longer than either IV or VI; metacoxae distinctly separated. *Scydmaenus hainanensis* can be separated from many *Scydmaenus* by its moderate body size (2.67–2.90 mm) and presence of four distinct pits along the posterior margin of the pronotum. Examination of the aedeagus (Fig. 3) is needed to confirm species identification.

**Description.** Males 2.80–2.85 mm long, female 2.67 mm long; dark reddish-brown in color throughout; vestiture relatively short and thin on head and pronotum, long and thicker on elytra.

**Head.** Head 0.56–0.59 mm long (males), 0.56 mm long (female), 0.48–0.50 mm wide at eyes (males), 0.48 mm wide at eyes (female); vertex distinctly wider than long, moderately convexly rounded, without sculpturing; posterior of head transverse between vertex and occiput; occiput three-fourths width of head; eyes large, flat, ovoid, anterior; antennae (Fig. 2) shorter than head and pronotum combined; anten-

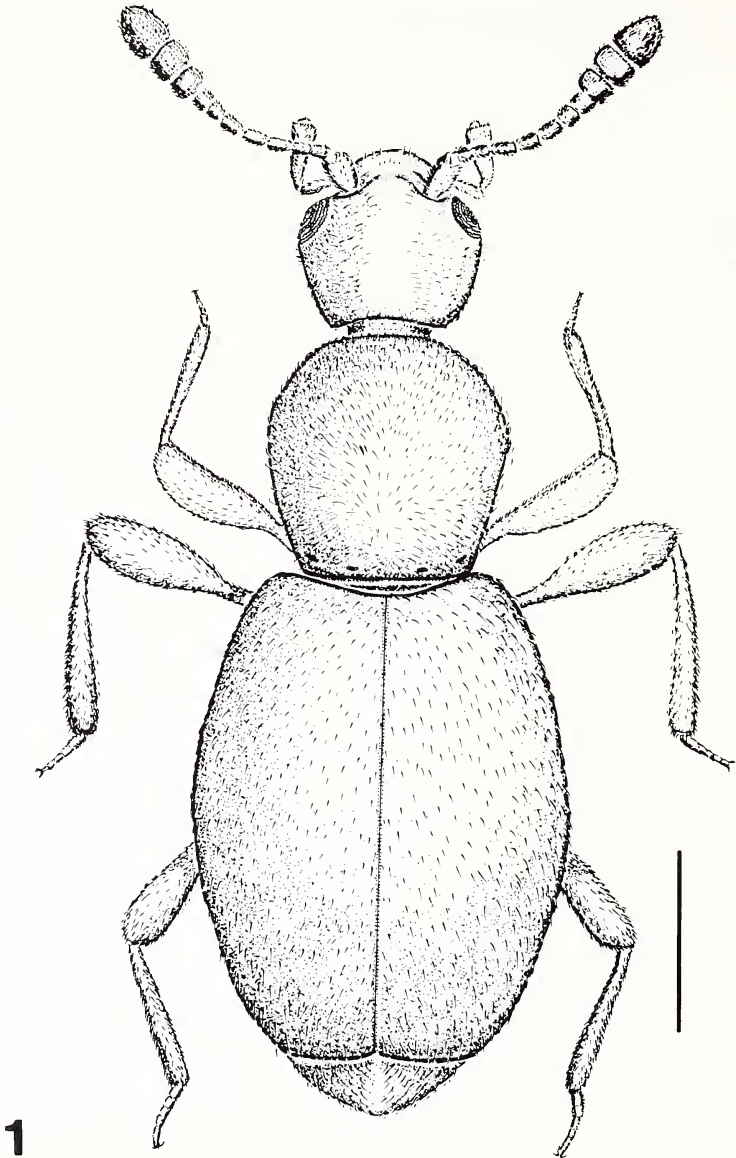


Fig. 1. *Scydmaenus hainanensis* O'Keefe n. sp., dorsal view. Scale bar = 0.50 mm.

nomere I 1.5 times longer than wide; antennomeres II–V subcylindrical; antennomeres II–IV subequal in size and shape, slightly longer than wide; antennomere V nearly twice as long as wide, 1.5 times longer than IV; antennomere VI subtrapezoidal, widest at distal end, as long as wide, half as long as V; antennomeres VII–VIII rectangular, slightly wider than long, subequal in size and shape to each other,

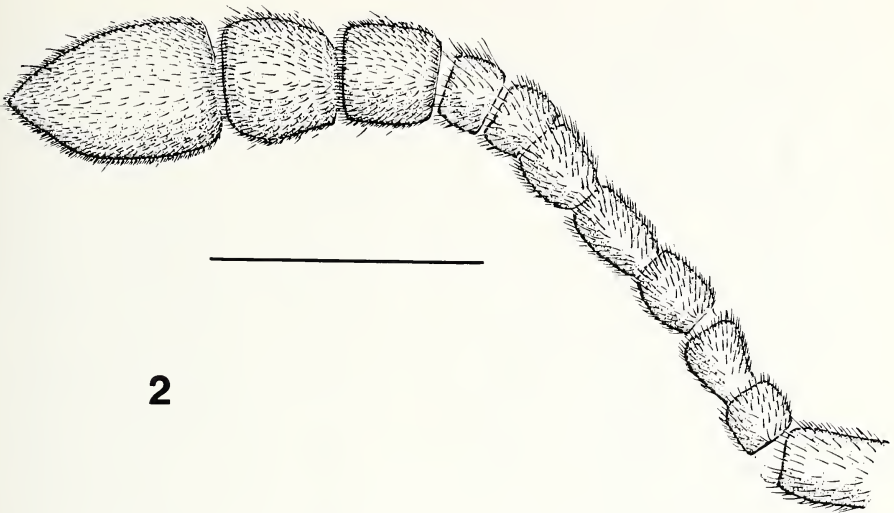


Fig. 2. *Scydmaenus hainanensis* O'Keefe n. sp., right antenna, lateral view. Scale bar = 0.25 mm.

each shorter and slightly wider than VI; antennomeres IX–XI forming distinct, compact club, slightly lighter in color than preceding antennomeres; antennomeres IX–X subtrapezoidal, widest at distal end; antennomere XI obovoid, apex gradually tapered, as long as IX and X combined; vestiture thin, suberect.

*Pronotum.* Pronotum slightly longer than broad, 0.74–0.75 mm long (males), 0.67 mm long (female), 0.64–0.66 mm wide at widest point (males), 0.64 mm wide at widest point (female), 0.43–0.46 mm wide at base (males), 0.45 mm wide at base (female); widest at anterior third; anterior angles gradually rounded, evenly tapered posteriorly; slightly convex; with 4 distinct pits along posterior margin, without posterolateral carinae; vestiture thin, dense, suberect.

*Elytra.* Elytra 1.49–1.54 mm long (males), 1.44 mm long (female), 0.96–0.98 mm wide (males), 0.96 mm wide (female); elytral silhouette ovoid, 1.7 times longer than wide, slightly convex, without basal foveae or grooves; humeri weakly developed, but present; scutellum small, but visible; vestiture golden, dense, long, suberect; pygidium exposed, subtriangular, nearly vertical. Hindwings, at least in males, complete.

*Legs.* Legs moderate in length, relatively stout (as in Fig. 1); male protarsomere I distinctly widened; femora and tibiae without modifications.

*Venter.* Prosternum flat, one-third prothoracic length, vestiture short, dense; mesosternum longitudinally carinate between coxae; metasternum large, slightly convex, vestiture short, moderately dense; metacoxae separated by coxal width; abdominal sternites convex, unmodified, visible sternite 1 nearly as long as 2–3 combined, sternites 2–5 subequal in length, sternite 4 nearly as long as 3–5 combined.

*Male genitalia* (Fig. 3a–c). Aedeagus elongate, nearly parallel-sided, slightly curved dorsally, darkly sclerotized; median lobe encased by fused parameres, shorter



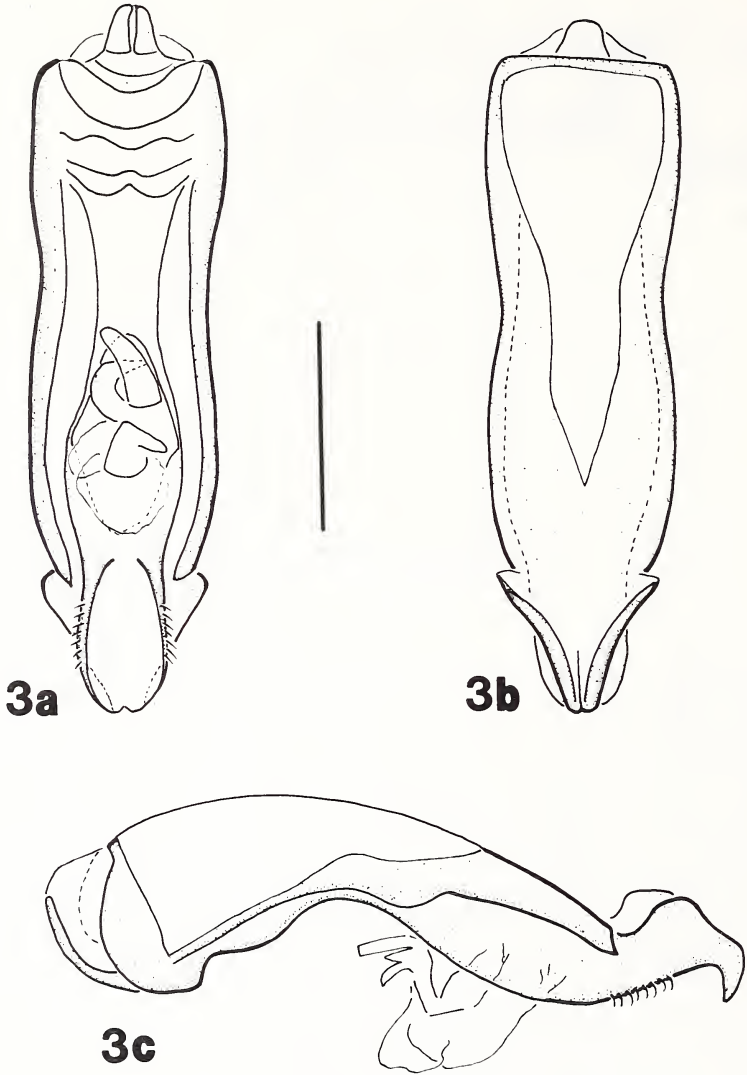


Fig. 3. *Scydmaenus hainanensis* O'Keefe n. sp., aedeagus, 3a. dorsal view, 3b. ventral view, 3c. right lateral view. Scale bar = 0.25 mm.

than parameres, three-fourths aedeagal length; ventral surface convex, thinly sclerotized; base with transverse, thickened cuticular band distal to membranous region and median longitudinal sclerotized section; parameres nearly inconspicuous at base, fused to median lobe at apex; apex highly modified into dorsal trough and arrow-head-shaped ventral projection; distal lateral margins carinate; distal dorsal margin of parameres with row of short setae.

**Etymology.** The name was derived from Hainan Island, China, the type locality.

**Comments.** *Scydmaenus hainanensis* is most easily separated from other species of *Scydmaenus* by the form of the aedeagus. In none of the other six known species of *Scydmaenus* from China is the apex modified into an arrowhead-shaped ventral projection (Fig. 3a, b). The aedeagus of *S. chinensis* Franz (Franz 1988:24, fig. 1a) has a much more elongate and narrow apex. For *S. kunmingensis* Franz, Franz (1988:25) stated that the aedeagus was similar to that of *S. minangkabauensis* Blatný (Blatný 1925:3) which he illustrated (Franz 1989:39, fig. 7) as being considerably more curved dorsally and narrowed apically. The aedeagus of *S. szechuanensis* Franz (Franz 1968:538, fig. 2) is strongly tapered at the apex and less curved dorsally. The aedeagus of *S. sinensis* Franz (Franz 1968:538, fig. 1) is modified at the apex, however, the apex has both dorsally and ventrally elongate projections. The aedeagus of *S. fukiensis* Franz (Franz 1985:115, fig. 27) is much broader at the base and has an unmodified apex. The aedeagus of *S. kiautunensis* Franz (Franz 1985:118, fig. 28) has a broadly bilobed apex, is more elongate, and lacks the modified apex of *S. hainanensis*. Of the three species from Taiwan for which there are figures (*S. vestitoides* Reitter, *S. csikii* Franz, and *S. taiwanicus* Franz) (Franz 1985), none have the aedeagal apex modified as it is in *S. hainanensis*. I have examined Franz' illustrations of other *Scydmaenus* from Thailand and Vietnam (Franz 1983, 1985, 1989) and only *S. vietnamensis* Franz (Franz 1983:179, fig. 6) possibly has a similarly modified aedeagal apex (at least from the lateral perspective). However, Franz stated *S. vietnamensis* males lack widened protarsi, have smaller eyes, and lack foveae on the pronotum. The protarsi of male *S. hainanensis* are distinctly widened, the eyes are large, and the pronotum has four distinct foveae. I have examined figures of *Scydmaenus* aedeagi in nearly all of Franz' articles (for a complete listing of Franz' publications see O'Keefe 1998) and have found aedeagi with similarly modified apices (only similar from the lateral perspective and none similar from the dorsal perspective) only from Africa. These species include *S. gabonensis* Lhoste (Franz 1961:167, fig. 8), *S. pseudotschadensis* Franz (Franz 1962:1032, fig. 2), *S. saharae* Franz (Franz 1962:1033, fig. 3), *S. sudanensis* Franz (Franz 1971a:9, fig. 1), *S. rhodesiae* Franz (Franz 1979:97, fig. 105), *S. newellianus* Franz (Franz 1979:98, fig. 106), *S. vanboveri* Franz (Franz 1976b:971, fig. 1), *S. makensis* Franz (Franz 1976b:973, fig. 2), *S. efflorescens* Schaufuss (Franz 1982:29, fig. 19), *S. schaufussi* Reitter (Franz 1982:21, fig. 10), and *S. moheliensis* Franz (Franz 1986:315, fig. 283). None of the *Scydmaenus* from the Neotropics, southeast Asia, or Australia/New Zealand that have published illustrations of the aedeagus have the genitalia modified as is found in *S. hainanensis*.

Measurements were made using a calibrated ocular micrometer on a Zeiss stereo microscope at 63X. Length measurements were from a lateral perspective as follows: head length—distance from posterior of vertex to apex of clypeus; pronotal length—distance from dorsoposterior margin of pronotum to anterior margin of pronotum at point of head insertion; and elytral length—distance from apex of elytron to anterior margin of humeral angle. Width measurements were from a dorsal perspective as follows: head width—distance across eyes; maximum pronotal width—distance across widest part of pronotum; pronotal basal width—distance between posterior-lateral angles of pronotum; and elytral width—distance across elytra at the widest point. Body length was the sum of head length, pronotal length, and elytral length.

## DISCUSSION

The family Scydmaenidae is currently divided into eleven tribes (Newton and Franz 1998). Only four of these are known to occur in eastern Asia: Eutheini, Cephenniini, Cyrtoscydmini, and Scydmaenini. Of the remaining seven tribes, three (Leptoscydmini, Plaumanniolini, and Siamitini) are each known from a single genus with one or two described species, and the other four (Clidicini, Mastigini, Leptomastacini, and Chevrolatiini) are widely distributed, but are not known to occur in eastern Asia. The Eutheini and Cephenniini are both hypothesized to be basal lineages within the Scydmaenidae (Hansen 1997, Newton and Franz 1998) and are both well represented in eastern Asia. The classification and species numbers discussed below were taken from Newton and Franz (1998).

*Eutheini.* The Eutheini are Holarctic in distribution and include five genera, three of which (*Eutheia* Stephens, *Euthiconus* Reitter, and *Veraphis* Casey) are found in eastern Asia. About one quarter of the known species of each genus occur in eastern Asia. The distribution of *Eutheia* and *Euthiconus* also includes western Europe and eastern North America and the distribution of *Veraphis* also includes western North America.

*Cephenniini.* The Cephenniini are nearly world wide in distribution with various genera being either from northern latitudes or from more equatorial or southern latitudes. Of the ten genera, three (*Chelonoidum* Strand, *Cephennodes* Reitter, and *Paraneseuthia* Franz) occur in eastern Asia. *Chelonoidum* have nearly a Holarctic distribution, occurring not only in eastern Asia, but also in Europe and North America. In addition to being found in eastern Asia, *Cephennodes* also occur in the Oriental Region and Africa, and *Paraneseuthia* are also known from Fiji.

*Scydmaenini.* The Scydmaenini include seven genera, only one of which, *Scydmaenus*, occurs in eastern Asia. This genus is found world wide and includes 31 described subgenera and numerous species placed as *incertae sedis*. Of the 730 described species, 24 are known from eastern Asia. This group is undoubtedly paraphyletic, and, without further analysis and recognition of smaller monophyletic groups, any biogeographic hypotheses or conclusions are tentative. However, three of the subgenera, *Mascarensia* Franz, *Eustemmus* Reitter, and *Nepaloscydmaenus* Franz, possibly do represent smaller monophyletic groups and can be used here for discussion. *Mascarensia* are widespread throughout the Oriental and Australian Regions and are also found on Madagascar. *Eustemmus* also occur in the western Palearctic and Ethiopian Regions and on New Caledonia. *Nepaloscydmaenus*, in addition to eastern Asia, also occur in Nepal.

*Cyrtoscydmini.* The Cyrtoscydmini include 46 recognized genera, of which five (*Euconus* Thomson, *Horaemorphus* Schaufuss, *Microscydmus* Saulcy & Croissandeau, *Neuraphes* Thomson, and *Stenichnus* Thomson) occur in eastern Asia. All of these genera are poorly represented in eastern Asia, with perhaps less than 5% of the known species being from this region. *Euconus* with 37 subgenera and nearly 2,500 described species, is most likely paraphyletic and of little current use for biogeographic study. However, six of the subgenera are known from eastern Asia (*Cladoconus* Reitter, *Euconophron* Reitter, *Himaloconus* Franz, *Napochus* Thomson, *Psomophus* Casey, and *Pycnophus* Casey), and four of these are biogeographically useful. *Psomophus* and *Napochus* are world wide in distribution, and *Napochus*

is possibly polyphyletic. In addition to eastern Asia, *Cladoconnus* and *Euconophron* are also found in the western Palearctic and Africa; *Himaloconnus* are also found in Nepal, and *Pycnophus* are circumtropical and Nearctic. Of the remaining four cyrtoscydmine genera, both *Microscydmus* and *Stenichnus* occur world wide, *Horaeomorphus* are also found on Madagascar, Australia, and the Oriental Region, and *Neuraphes* also occur in the western Palearctic and Nepal.

In summary, the scydmaenid fauna of eastern Asia has some components shared with those of the western Palearctic and southeast Asia, and has some components that are either Holarctic or nearly world wide. Of the taxa found in eastern Asia, six (*Euconnus*, *Microscydmus*, *Pycnophus*, *Psomophus*, *Scydmaenus*, and *Stenichnus*) are nearly worldwide in distribution and four others (*Chelonooidum*, *Eutheia*, *Euthiconus*, and *Veraphis*) are Holarctic in distribution. With the western Palearctic, eastern Asia also shares *Cladoconnus*, *Euconophron*, *Neuraphes*, *Pararaphes*, and *Scydmorephes*; and with southeast Asia, eastern Asia shares *Cephennodes*. In addition to eastern Asia, *Horaeomorphus* and *Mascarensia* are also found in Madagascar, southeast Asia and Australia, *Himaloconnus* and *Nepaloscydmaenus* also occur in India, and *Paraneseuthia* are also known from Fiji. Two scydmaenid lineages, Chevrolatiini and Mastiginae, are absent from eastern Asia. The Eutheiini and Cephenniini are proportionately better represented than either the Cyrtoscydmini or Scydmaenini, possibly due in large part to the recent efforts of Kurbatov (Kurbatov 1990a, 1991, 1995). If the scydmaenid fauna of eastern Asia is similar in numbers of species to that of either Europe or North America, then a doubling or tripling of the number of species should be expected.

#### CATALOG OF THE SCYDMAENIDAE OF EASTERN ASIA

The following is a catalog of the Scydmaenidae of eastern Asia (eastern Russia, Korea, Japan, China, and Taiwan). Genera are arranged alphabetically within each tribe and species arranged alphabetically within each genus. Valid names are in **bold italics**; original combinations, if different from valid names, are in *italics* following valid names; and junior synonyms are in **bold**. The catalog of species from eastern Asia is included here because of the significant number of species described from this region since the previous catalog (Csiki 1919), and is broader in scope than the catalog provided by Franz (Franz 1976a:58–60) for the Japanese species.

#### EUTHEIINI

- Eutheia exortiva*** Kurbatov 1990a:137, figs. 1g–h; Kurbatov 1990b:80, figs. 1g–h.  
RUSSIA (Primorski)
- Eutheia hariola*** Kurbatov 1991:153, fig. a.  
RUSSIA (Primorski)
- Eutheia holzeri*** Franz 1976a:51, 58, fig. 1.  
JAPAN
- Eutheia japonica*** Sawada 1962:20, figs. 6–7; Franz 1976a:58.  
JAPAN
- Eutheia klapperichi*** Franz 1985:93, fig. 3.  
TAIWAN
- Eutheia simillima*** Franz 1985:93, fig. 2.  
TAIWAN
- Eutheia taiwanensis*** Franz 1985:92, fig. 1.  
TAIWAN
- Euthiconus lustrifucus*** Kurbatov 1990a:136, figs. 1a–c, 1d–f; Kurbatov 1990b:79,  
figs. 1a–c, 1d–f.  
RUSSIA (Primorski, Kurile Islands)
- Euthiconus paradoxus*** Sawada 1962:19, figs. 1–5; Franz 1976a:58.  
JAPAN



- Veraphis fatiloquus* Kurbatov 1995:944, figs. 1–4. RUSSIA (Primorski)  
*Veraphis irkutensis* (Reitter); Franz 1971b:76; Kurbatov 1990a:139; Kurbatov 1990b:83; Kurbatov 1995:946. RUSSIA (Irkutsk, Primorski)  
*Euthia irkutensis* Reitter 1896:64; Csiki 1919:5.  
*Euthia euplecticornis* Reitter 1896:64; Csiki 1919:4. Synonymized by Franz 1971b:76.  
*Veraphis ishikawai* Hisamatsu 1985:13, figs. 15–16; Kurbatov 1995:946. JAPAN

## CEPHENNIINI

- Cephennodes japonicus* (Sharp); Csiki 1919:17; Kurbatov 1995:948, fig. 7. JAPAN  
*Cephennium japonicum* Sharp 1886:50; Franz 1976a:58.  
*Cephennodes vafer* Kurbatov 1995:946, figs. 5–6. RUSSIA (Kurile Islands)  
*Chelonoidum besucheti* Kurbatov 1995:954, figs. 16–17. JAPAN  
*Chelonoidum graeseri* (Reitter); Kurbatov 1995:948, figs. 8–9. RUSSIA (Primorski)  
*Cephennodes graeseri* Reitter 1887:270; Csiki 1919:17. JAPAN  
*Chelonoidum loebli* Kurbatov 1995:954, figs. 18–19. JAPAN  
*Chelonoidum moderatum* Kurbatov 1995:951, figs. 12–13. RUSSIA (Primorski, Kurile Islands), JAPAN  
*Chelonoidum torsum* Kurbatov 1995:957, figs. 20–21. JAPAN  
*Chelonoidum ussuricum* Kurbatov 1995:952, figs. 14–15. RUSSIA (Primorski)  
*Chelonoidum pullatum* Kurbatov 1995:948, figs. 10–11. RUSSIA (Kurile Islands), JAPAN  
*Paraneseuthia saga* Kurbatov 1991:154, fig. b. RUSSIA (Kurile Islands)  
*Paraneseuthia trepida* Kurbatov 1990a:137, figs. 1j, 1l–m; Kurbatov 1990b:82, figs. 1j, 1l–m. RUSSIA (Primorski)

## CYRTOSCYDMINI

- Euconnus aculeifer* Franz 1985:103, fig. 14. TAIWAN  
*Euconnus (Himaloconnus) alishanensis* Franz 1985:96, fig. 6. TAIWAN  
*Euconnus alishanicus* Franz 1985:100, fig. 11. TAIWAN  
*Euconnus alishaniformis* Franz 1985:101. TAIWAN  
*Euconnus (Psomophus) chinensis* Franz. CHINA (Fujian)  
*Euconnus (Spanioconnus) chinensis* Franz 1985:114, fig. 25.  
*Euconnus (Napochus) deprecator* Kurbatov 1993b:595, figs. 5–7. RUSSIA (Primorski)  
*Euconnus dulcis* Sharp 1886:47; Csiki 1919:47; Franz 1976a:59. JAPAN  
*Euconnus efferus* Franz 1985:104, fig. 15. TAIWAN  
*Euconnus fenchihuensis* Franz 1985:106, fig. 17. TAIWAN  
*Euconnus fenchihui* Franz 1985:105, fig. 16. TAIWAN  
*Euconnus formosanus* Reitter 1914:266; Franz 1985:108, fig. 20. TAIWAN  
*Euconnus (Microscydmus) formosanus* Reitter; Csiki 1919:55.  
*Euconnus fukiensis* Franz 1985:115, fig. 26. CHINA (Fujian)  
*Euconnus (Euconophron) fustiger* (Sharp); Franz 1976a:55, 59, fig. 4. JAPAN  
*Scydmaenus fustiger* Sharp 1874:128.  
*Euconnus fustiger* (Sharp); Sharp 1886:47; Csiki 1919:47.

- Euconnus impar* Sharp 1886:46; Csiki 1919:49; Franz 1976a:59. JAPAN  
*Euconnus japonicus* (Sharp); Sharp 1886:47; Csiki 1919:49; Franz 1976a:59. JAPAN  
*Scydmaenus japonicus* Sharp 1874:127.  
*Euconnus (Himaloconnus) klapperichianus* Franz 1985:97, fig. 7. TAIWAN  
*Euconnus lewisii* Sharp 1886:47; Csiki 1919:50; Franz 1976a:59. JAPAN  
*Euconnus lijingkei* Franz 1995:36, fig. 1. KOREA  
*Euconnus microalishanicus* Franz 1985:103, fig. 13. TAIWAN  
*Euconnus (Euconophron) miyawakainus* Franz 1976a:56, 59, fig. 5. JAPAN  
*Euconnus oscillans* Sharp 1886:48; Csiki 1919:50; Franz 1976a:59. JAPAN  
*Euconnus paraalishanicus* Franz 1985:102, fig. 12. TAIWAN  
*Euconnus (Napochus) parafricatoris* Franz 1985:99, fig. 9. TAIWAN  
*Euconnus raucus* Sharp 1886:48; Csiki 1919:51; Franz 1976a:59. JAPAN  
*Euconnus (Napochus) sauteri* Reitter 1914:265; Csiki 1919:62; Franz 1985:97, fig. 8. TAIWAN  
*Euconnus sauterianus* Franz 1985:106, fig. 18. TAIWAN  
*Euconnus (Napochus) schenklengi* Reitter 1914:266; Csiki 1919:63; Franz 1985:99. TAIWAN  
*Euconnus schonfeldti* Reitter 1891:19; Csiki 1919:51; Franz 1976a:59. JAPAN  
*Euconnus (Pycnophus) taiwanicus* Franz. TAIWAN  
*Euconnus (Nudatoconnus) taiwanicus* Franz 1985:99, fig. 10. TAIWAN  
*Euconnus taiwanus* Franz 1985:107, fig. 19. TAIWAN  
*Euconnus (Cladoconnus) ussuriensis* Kurbatov 1988:1744, figs. d-f. RUSSIA (Primorski)  
*Horaeomorphus* (s.str.) *chinensis* Franz 1985:116. CHINA (Fujian)  
*Horaeomorphus* (s.str.) *taiwanensis* Franz 1985:95. TAIWAN  
*Microscydmus akauensis* Reitter 1914:267; Franz 1985:109. TAIWAN  
*Euconnus (Microscydmus) akauensis* (Reitter); Csiki 1919:55.  
*Microscydmus debilis* (Sharp): NEW COMBINATION JAPAN  
*Scydmaenus debilis* Sharp 1874:127.  
*Euconnus (Microscydmus) debilis* (Sharp); Csiki 1919:55; Franz 1976a:59.  
*Microscydmus gregarius* Kurbatov 1988:1743, fig. c. RUSSIA (Jewish Autonomous)  
*Neuraphes (Pararaphes) filiulus* Reitter 1896:65; Csiki 1919:23. RUSSIA (Irkutsk)  
*Neuraphes (Pararaphes) fraterculus* Reitter 1896:66; Csiki 1919:23. RUSSIA (Irkutsk)  
*Neuraphes (Pararaphes) niponensis* Franz 1976a:53, 59, fig. 2. JAPAN  
*Neuraphes* (s.str.) *pudibundus* Kurbatov 1988:1742, figs. a-b. RUSSIA (Amur)  
*Scydmoraphes japonicus* Franz 1976a:54, 59, fig. 3. JAPAN  
*Scydmoraphes minutus* (Chaudoir); Kurbatov 1988:1745. RUSSIA (Amur, Jewish Autonomous)  
*Scydmaenus minutus* Chaudoir 1845:186.  
*Stenichnus aemulator* Kurbatov 1993b:594, fig. 4. RUSSIA (Primorski)  
*Stenichnus bicolor* (Denny); Kurbatov 1993b:592. RUSSIA (Primorski)  
*Scydmaenus bicolor* Denny 1825:56, 68, pl. 13 fig. 4.  
*Stenichnus dividus* Kurbatov 1993b:592, figs. 2-3. RUSSIA (Primorski)  
*Stenichnus klapperichi* Franz 1985:94, fig. 4. TAIWAN

- Stenichnus pollens* (Sharp); Csiki 1919:36; Franz 1976a:59. JAPAN  
*Scydmaenus pollens* Sharp 1886:49.  
*Stenichnus saltuarius* Kurbatov 1993b:591, fig. 1. RUSSIA (Primorski)  
*Stenichnus sibiricus* (Reitter); Csiki 1919:38; Franz 1970:27. RUSSIA (Irkutsk)  
*Cyrtoscydmus sibiricus* Reitter 1896:66.  
*Stenichnus taiwanicus* Franz 1985:94, fig. 5. TAIWAN

## SCYDMAENIINI

- Scydmaenus angustulus* Csiki 1919:78. JAPAN  
*Eumicrus angustus* Sharp 1886:49.  
*Scydmaenus chinensis* Franz 1988:23, figs. 1a–b. CHINA (Sichuan, Yunnan)  
*Scydmaenus cribratus* (Sharp); Csiki 1919:72; Franz 1976a:59. JAPAN  
*Eumicrus cribratus* Sharp 1886:50.  
*Scydmaenus* (s. str.) *csikii* Franz 1985:111, fig. 23. TAIWAN  
*Scydmaenus curtippennis* (Sharp); Csiki 1919:79; Franz 1976a:59. JAPAN  
*Eumicrus curtippennis* Sharp 1886:49.  
*Scydmaenus exculcator* Kurbatov 1993a:152, figs. a–b. RUSSIA (Primorski)  
*Scydmaenus* (*Cholerus*?) *formosanus* Csiki 1937:6; Franz 1985:113. TAIWAN  
*Scydmaenus* (s.str.) *fukiensis* Franz 1985:116, fig. 27. CHINA (Fujian)  
*Scydmaenus hainanensis* O'Keefe n. sp. CHINA (Hainan)  
*Scydmaenus* (*Mascarensia*) *kasuganus* Franz 1976a:58, 59, fig. 6. JAPAN  
*S. honshuensis* Franz 1976a:57, 59. Nomen nudum in Figure 6 caption and catalog.  
*Scydmaenus* (s.str.) *kiatunensis* Franz 1985:117, fig. 28. CHINA (Fujian)  
*Scydmaenus kunmingensis* Franz 1988:24. CHINA (Sichuan, Yunnan)  
*Scydmaenus nikitskii* Kurbatov 1988:1744, figs. g–j; Kurbatov 1993a:155 RUSSIA (Primorski)  
*Scydmaenus obuncatus* Kurbatov 1993a:153, 155, figs. e–f. RUSSIA (Primorski)  
*Scydmaenus punctatissimus* Franz 1975:172, fig. 2; Kurbatov 1993a:155, figs. c–d. RUSSIA (Primorski)  
*Scydmaenus reversus* Sharp 1874:128; Csiki 1919:73; Franz 1976a:59. JAPAN  
*Eumicrus reversus* (Sharp); Sharp 1886:50.  
*Scydmaenus sinensis* Franz 1968:537, fig. 1. CHINA (Sichuan)  
*Scydmaenus szechuanensis* Franz 1968:538, fig. 2. CHINA (Sichuan)  
*Scydmaenus* (*Eustemmus*) *taihorinus* Reitter 1914:268; Csiki 1919:77; Franz 1985:112. TAIWAN  
*Scydmaenus* (*Nepaloscydmaenus*) *taiwanensis* Franz 1985:113. TAIWAN  
*Scydmaenus* (s. str.) *taiwanicus* Franz 1985:112, fig. 24. TAIWAN  
*Scydmaenus takaranus* Nakane 1963:22; Franz 1976a:59. JAPAN  
*Scydmaenus* (s. str.) *vestitus* (Sharp); Reitter 1914:267; Csiki 1919:85; Franz 1985:109, fig. 21. JAPAN  
*Eumicrus vestitus* Sharp 1874:126; Sharp 1886:49  
*Scydmaenus* (s.str.) *vestitoides* Reitter 1914:268; Csiki 1919:85; Franz 1985:110, fig. 22. TAIWAN  
*Scydmaenus hoabinhensis* Lhoste 1938:114. Placed as a possible synonym by Franz 1985:110.

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